

What is claimed is:

1. A method of computing an economic value created by a particular business activity, the method comprising, in sequence, the steps of:
  - 5        a) calculating an aggregate cost of a product manufacture or acquisition activity;
  - b) selecting one or more parameters, the parameters comprising a customer, a sales region, a product grade and a market segment;
  - c) calculating a sales volume and a net price related to the one or
  - 10     more parameters;
  - d) calculating a manufacturing contribution related to the one or more parameters;
  - e) calculating an after tax operating income related to the one or more parameters;
  - 15     f) calculating an economic value added for the one or more parameters, thereby determining the economic value created by the particular business activity.
2. A method of computing the economic value created by a particular business activity, the method comprising, in sequence, the steps of:
  - 20        a) calculating an aggregate cost of a product manufacturing or acquisition activity by:
    - i) collecting cost data from diverse sources into a relational database, the cost data comprising:
  - 25        1) collecting utility and raw materials cost for each product;
  - 2) assembling cost data for each manufacturing operation;
  - 3) assembling productivity, composition and packaging data for each product grade;
  - 4) collecting manufacturing volume by product grade for each
  - 30     manufacturing operation;
  - b) calculating a sales volume and a net price related to a customer, a sales region, a grade and a market segment by:
    - i) collecting sales data related to each customer, region, and grade;

ii) identifying the market segment for each customer, region, and grade;

iii) identifying rebates and discounts for each customer, region, and grade;

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c) calculating manufacturing contribution related to each customer, region, grade, and market segment by:

i) collecting finished product distribution expense and variable cost data related to each product and each region;

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d) calculating after tax operating income related to each customer, region, grade, and market segment by:

i) collecting research and development and all other administrative expense and net permanent investment data related to each product family;

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ii) collecting sales expense data related to each region, adjusted for sales support provided by other regions;

iii) identifying sales expense effort by product families related to each region and market segment;

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iv) identifying effective regional tax rates and miscellaneous global cost data;

e) calculating economic value added related to each customer, region, grade, and market segment.

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3. The method of claim 2 wherein the collection steps a) i), b) i), c) i), d) i) and d) ii) is accomplished by loading the data into predetermined fields in a relational database system.

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4. The method of claim 2 wherein the collection steps a) i), b) i), c) i) and d) i) and ii) further comprise, before the loading step, the step of accumulating data in one or more spreadsheets.

5. The method of claim 2, further comprising, after each collection step,  
the step of generating a discrepancy report by determining if data required  
for a subsequent calculation is missing and analyzing the data against  
predetermined criteria for discrepancies or possible out of normal range  
values.
6. The method of claim 2 wherein the calculation steps a), b), c) d), and e)  
are performed by:
  - 1) accessing the data in the predetermined fields of the relational  
database system;
  - 2) applying predetermined equations to the data; and
  - 3) storing the results in predetermined results fields in the relational  
database system.
- 15 7. The method of claim 6, further comprising, before each calculation  
step, the step of generating a discrepancy report by determining if data  
required for a subsequent calculation is missing and analyzing the data  
against predetermined criteria for discrepancies or possible out of normal  
range values.
- 20 8. The method of claim 6 further comprising displaying the results in  
predetermined user selectable graphical formats by:
  - 4) defining each graphical format to have predetermined input  
parameters;
  - 5) accessing the predetermined results fields of the relational  
database that correspond to the input parameters.
9. The method of claim 8 wherein the predetermined results fields are  
loaded into a spreadsheet and then into a pivot table to display the results.
- 30 10. The method of claim 6 wherein the graphical format is a numeric table;  
comprising a pivot table.

11. The method of claim 6 wherein the graphical format is a waterfall chart.
- 5      12. The method of claim 6 wherein the graphical format is a bar chart.
13. The method of claim 6 wherein the graphical format is a line graph.
- 10     14. The method of claim 1, wherein the business activity is a manufacturing operation, and wherein costs across families of products are distributed based upon shared use of manufacturing assets.
- 15     15. The method of claim 14, wherein the shared use of assets is determined by the fraction of time a product family occupies each asset.
16. The method of claim 14, wherein the shared use of assets is determined by the volume fraction of a product family flowing through each asset.
- 20     17. The method of claim 14, wherein unexpected costs are allocated over all the products manufactured according to predetermined criteria.
18. The method of claim 1, further comprising, before each calculation step, the step of generating a discrepancy report by determining if data required for each calculation is missing and analyzing the data against predetermined criteria for discrepancies or possible out of normal range values.
- 25     19. The method of claim 18, further comprising the step of terminating the calculation if the discrepancy report indicates missing data or data containing discrepancies.
20. The method of claim 2, wherein the step a) of calculating an aggregate cost of a product manufacture or acquisition activity further comprises the step of reconciling the cost of manufacture of an internally produced grade with the raw materials list.
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21. The method of claim 20, comprising the steps of:

- a) upon receiving a cost change that can affect the Cost of Manufacture, comparing the Ingredients List for all Production Units to the Cost of Manufacture for each product Grade to determine each affected ingredient, where the Cost of Manufacture is an aggregated value based upon the production mix entered;
- 5 b) for each affected ingredient that is used to manufacture a product grade, calculating the difference between an existing (entered or previously calculated) ingredient cost and the Cost of Manufacture, where the fixed cost and the variable cost is calculated independently;
- 10 c) if the difference between the existing ingredient cost and the Cost of Manufacture exceeds a predetermined threshold, updating the ingredient cost with the cost of manufacture;
- 15 d) initiating a recalculation of all cost of manufacture values for all affected grades;
- e) repeating steps a) through d) until the difference between the entered ingredient cost and the Cost of Manufacture is less than or equal to the predetermined threshold or until a predetermined number of repetitions has been reached.

22. A machine-readable storage medium containing a set of instructions for causing a computing device to calculate an economic value created by a particular business activity, said instructions comprising the steps of:

- 25 a) receiving data from a user interface;
- b) calculating an aggregate cost of a product manufacture or acquisition activity;
- 30 c) providing an input port for a user to select one or more parameters, the parameters comprising a customer, a sales region, a product grade and a market segment;

- d) calculating a sales volume and a net price related to the one or more parameters,;
- e) calculating a manufacturing contribution related to the one or 5 more parameters;
- f) calculating an after tax operating income related to the one or more parameters;
- 10 g) calculating an economic value added for the one or more parameters, thereby determining the economic value created by the particular business activity.

23. A hybrid method of determining an economic value created by a 15 particular business activity in accordance with claim 1, the method utilizing a plurality of electronic spreadsheets and a relational database, the spreadsheets being used for the collection of data and the display of results, the relational database being used to receive the data from the spreadsheets, to calculate results in accordance with predetermined 20 equations and to store the results in predefined data structures.

24. A system for computing an economic value created by a particular business activity in accordance with claim 1, the system comprising: 25

- a server node having a memory therein, the memory having a user-interface section, a custodian-accessible section, a data interface section, and a repository section,
- the user-interface section having at least one 30 predetermined user-accessible form for entering data and at least one predetermined graphical format for viewing data and results;
- the custodian-accessible section having privileged access to the user-interface section, to the data interface 35 section and to the repository section;

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- 5        the repository section having at least one relational database containing predefined records that have been entered by a user or received by the data interface and predetermined equations for operation upon the records to produce results;
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- 10      at least one user node connectible to the memory of the server, the user node being operable in either an input mode or an output mode,
  - when operable in the input mode, the user node being connectible to the repository section for entry of data or for editing of records previously entered by that user,
  - when operable in the output mode, the user node being connectible to the repository section for retrieval of data and results, the user node displaying data and results in accordance with the at least one predetermined graphical format.